

REMARKS

Claims 5-55 are currently pending in the subject application and claims 5-21 and 40-55 are presently under consideration. Claims 1-4 are canceled. Claims 18, 22-39, 42, and 43 are withdrawn. Claim 5 has been amended as shown on pages 2-9 of the Reply.

Applicants' representative thanks the Examiner for the courtesies extended during the teleconference of August 1, 2007.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 5-21 Under 35 U.S.C. § 102(e)

Claims 5-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Helfman, *et al.* (US 6,396,513). It is requested that this rejection be withdrawn for at least the following reason. Helfman *et al.* does not disclose each and every element of the subject claims.

For a prior art reference to anticipate, 35 U.S.C. § 102 requires that “*each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting Verdegaa Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)) (emphasis added).

The claimed subject matter relates to the prioritizing of an item of information, such as text or an e-mail message. In one aspect of the claimed subject matter, a probabilistic-based classifier can be employed for decision making and/or rendering inferences associated with determining priority of an item. In an aspect of the claimed subject matter, the classifier can be explicitly trained with, for example, predefined data sets, and/or implicitly trained, which can include real-time training, so the classifier may “learn” how to discriminate, and/or render an inference, with regard to the priority of the item. For example, the implicit training of the classifier can include using current and historical information regarding a user's presence, activity, and focus of attention of a user (*e.g.*, keyboard activity, mouse activity); and such information, as well as other information, can be utilized to adaptively update (*e.g.*, refine) the classifier. The

classifier can then be employed to determine priority for a received item (e.g., text), and that priority can be utilized to facilitate electronic communication. Furthermore, priority is not limited to assigning such priority to a text such as an email message. Priority can be defined in terms of a loss function. More specifically, priority can be defined in terms of the expected cost in lost opportunities per time delayed in reviewing the text after it has been received - that is, the expected lost or cost that will result for delayed processing of the text. This loss function can further vary according to the type of text received.

In particular, independent claim 5, as amended, recites: *...implicitly training the probabilistic-based classifier to infer a priority level of a received item based in part on at least one of current or historical information of at least a focus of attention of a user that are indicative of item priority levels, the focus of attention comprising at least one of keyboard activity or mouse activity, or a combination thereof, associated with the user; determining a priority level of the received item utilizing the probabilistic-based classifier, the priority being representative of at least an urgency of the item relative to the intended recipient, the priority comprises a measure of a rate of cost accrued with delayed review of the item; and,* Helfman *et al.* does not disclose this distinctive feature of the claimed subject matter.

Rather, Helfman *et al.* relates to allowing a recipient of e-mail messages to create multiple mailboxes, into which incoming mail is automatically sorted, based on criteria established by the user. The user can define conditions for each mailbox which trigger alarms when the conditions are met. (See Col. 1, lines 40-45). In addition, Helfman *et al.* allows prioritizing and ranking of the mailboxes to further aid in sorting the incoming mail.

However, unlike the claimed subject matter, Helfman *et al.* fails to disclose defining priority in terms of the rate of cost accrued with delayed review of a document. Specifically, a text, such as an email message, is input into the classifier, which based thereon generates a priority for the text, measured as a percentage. This percentage is a measure of the likelihood that the text is of high priority, based on the previous training of the classifier. The priority is a measure of the rate of cost accrued with delayed review of the document. (See pg. 12, lines 15-21 and pg. 13, lines 24-30).

Helfman *et al.* merely discloses prioritizing mailboxes to automatically sort e-mail messages. The mailboxes of Helfman *et al.* are ranked, such that when a user reads the messages in a mailbox, the rank of the mailbox changes because the mailbox no longer contains unread messages. Typically, the mailbox is given a rank based on unread messages, message or no messages. The mailbox is then ranked based on pre-defined criteria under control of the user and thresholds are established. Helfman *et al.* does not disclose defining priority in terms of the expected cost in lost opportunities per time delayed in reviewing the text after a message has been received - that is, the expected lost or cost that will result for delayed processing of the text. Accordingly, Helfman *et al.* does not expressly or inherently disclose a method utilizing a probabilistic-based classifier trained with predefined data sets, comprising *...determining a priority level of the received item utilizing the probabilistic-based classifier, the priority being representative of at least an urgency of the item relative to the intended recipient, the priority comprises a measure of a rate of cost accrued with delayed review of the item....*

In view of at least the above, it is readily apparent that Helfman *et al.* fails to expressly or inherently disclose applicants' claimed subject matter as recited in independent claim 5 (and claims 6-21 which respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

II. Rejection of Claims 40-55 Under 35 U.S.C. § 103(a)

Claims 40-55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Helfman *et al.* (US 6,396,513) in view of Theimer, *et al.* (US 5,812,865). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Helfman *et al.* and Theimer *et al.*, individually or in combination, do not teach or suggest each and every element as set forth in the subject claims.

To reject claims in an application under §103, an examiner must show an unrebutted *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art,

to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicants' disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed subject matter relates to the prioritizing of an item of information, such as text or an e-mail message. Furthermore, priority is not limited to assigning such priority to a text such as an email message. Priority can be defined in terms of a loss function. More specifically, priority can be defined in terms of the expected cost in lost opportunities per time delayed in reviewing the text after it has been received - that is, the expected lost or cost that will result for delayed processing of the text. This loss function can further vary according to the type of text received.

Claim 40 recites: determining a loss function based on an expected cost in lost opportunities as a function of an amount of time delayed in reviewing an item after the item has been received, the lost opportunities comprising an opportunity to attend a meeting at a specified time; classifying priority of the item based in part on the loss function utilizing a trained classifier; and utilizing the classified priority of the item to infer a desired computer-based automated action to take to facilitate electronic communication.

As stated *supra*, Helfman *et al.* merely discloses prioritizing mailboxes to automatically sort e-mail messages. The mailboxes of Helfman *et al.* are ranked, such that when a user reads the messages in a mailbox, the rank of the mailbox changes because the mailbox no longer contains unread messages. Typically, the mailbox is given a rank based on unread messages, message or no messages. The mailbox is then ranked based on pre-defined criteria under control of the user and thresholds are established. Helfman *et al.* does not disclose defining priority in terms of the expected cost in lost opportunities per time delayed in reviewing the text after a message has been received - that is, the expected lost or cost that will result for delayed processing of the text. Accordingly, Helfman *et al.* does not expressly or inherently disclose a method

comprising, ...*determining a loss function based on an expected cost in lost opportunities as a function of an amount of time delayed in reviewing an item after the item has been received...*

Theimer *et al.* does not cure the defects of Helfman *et al.* Theimer *et al.* is utilized to provide sending a reminder message to a user for a meeting schedule, thus Theimer *et al.* does not disclose determining the loss of function based on an expected cost in lost opportunities as a function of an amount of time delayed in reviewing an item after the item has been received. (See pg. 7 of the Office Action dated 6-4-07).

In view of the aforementioned deficiencies of the cited art, it is respectfully submitted that this rejection be withdrawn with respect to independent claim 40 (and claims 41-55 which depend there from).

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP263USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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